

# PATENT COOPERATION TREATY

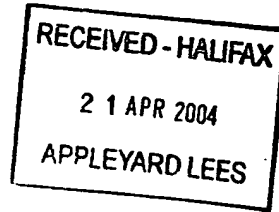
From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

1 207 12

19 DEC 2004

To:

Walsh, David Patrick  
APPLEYARD LEES  
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PCT

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing  
(day/month/year)

16.04.2004

Applicant's or agent's file reference  
DPW/Y957 4537

**IMPORTANT NOTIFICATION**

International application No.  
PCT/EP 03/01990

International filing date (day/month/year)  
26.02.2003

Priority date (day/month/year)  
26.02.2002

Applicant  
SIGMA COATINGS B.V. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

#### 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international  
preliminary examining authority:



European Patent Office  
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# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>DPWY357</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416)	
International application No. <b>PCT/EP 03/01990</b>	International filing date ( <i>day/month/year</i> ) <b>26.02.2003</b>	Priority date ( <i>day/month/year</i> ) <b>26.02.2002</b>
International Patent Classification (IPC) or both national classification and IPC <b>C07F7/18, C07F7/18</b>		
Applicant <b>SIGMA COATINGS B.V. et al.</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 8 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of    sheets.

3. This report contains indications relating to the following items:

- I    ☒ Basis of the opinion
- II   ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V   ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  <b>25.09.2003</b>	Date of completion of this report  <b>16.04.2004</b>
Name and mailing address of the international preliminary examining authority:   <b>European Patent Office</b> <b>D-80298 Munich</b> <b>Tel. +49 89 2399 - 0 Tx: 523656 epmu d</b> <b>Fax: +49 89 2399 - 4465</b>	Authorized Officer  <b>Richter, H</b>  Telephone No. <b>+49 89 2399-8539</b>



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/EP 03/01990**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-16 as originally filed

**Claims, Numbers**

1-19 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

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International application No. **PCT/EP 03/01990**

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	1-18
	No: Claims	19
Inventive step (IS)	Yes: Claims	1-18
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-19
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

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International application No. PCT/EP 03/01990

**Re Item V**

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1: PATENT ABSTRACTS OF JAPAN vol. 1998, no. 13, 30 November 1998 (1998-11-30) & JP 10 212293 A (NITTO KASEI CO LTD;NOF CORP), 11 August 1998 (1998-08-11)
- D1a: DATABASE MACHINE TRANSLATION JPO [Online] Japanese Patent Office; 'http://www4.jpdl.jpo.go.jp/cgi-bin/tran\_w eb\_cgi\_eije'  
Database accession no. JP 10 212293
- D2: US-A-3 403 169 (HERGENROTHER PAUL M ET AL) 24 September 1968 (1968-09-24)
- D3: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. Reaction ID 673962 XP002205020 & VALADE: COMPTE RENDU DE L'ACADEMIE DES SCIENCES, no. 246, - 1958 pages 952-953, cited in the application
- D4: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 2322813; XP002240418
- D5: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 2351835; XP002240423
- D6: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 2412288; XP002240424
- D7: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 2409969; XP002240425
- D8: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 4369442; BRN 4368137; XP002240426
- D9: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 2254838; XP002240427
- D10: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der

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International application No. PCT/EP 03/01990

- Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 1368535; XP002240428
- D11: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 4667021
- D12: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 2238382
- D13: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 4370688
- D14: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 4372078
- D15: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 4859331
- D16: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 4376133
- D17: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 4275597
- D18: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 4274517
- D19: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 4189160
- D20: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 3547154
- D21: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 2995270
- D22: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der  
Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no.  
BRN 7632735

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- D23: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 5429839
- D24: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 5018427
- D25: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 2869784
- D26: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 2774864
- D27: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 2739708
- D28: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 2423470; BRN 2423471; BRN 2423472
- D29: DATABASE CROSSFIRE BEILSTEIN [Online] Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE; Database accession no. BRN 2982647; BRN 2995148; BRN 2981205; BRN 2981206; BRN 2977557; BRN 3004652

The documents D11-D29 were not cited in the international search report. Copies of the documents are appended hereto.

1. The European Boards of Appeal have consistently decided that claims for products defined in terms of processes for their preparation ("product-by-process" claims) are admissible only if - apart from any other conditions the products themselves fulfil the requirements for patentability, i.e. in particular if they are new and involve an inventive step.

In the context of the present claim 19, it also appears necessary to point out that Article 64(2) EPC neither confers novelty on a claim which is drafted as a "product-by-process" claim when no novelty exists in such product per se, nor entitles or enables an applicant for a European patent to include in his patent such claims which do not satisfy the requirements for patentability of Article 52(1) EPC.

In this connection reference is also made to decision T 664/90 of 9 July 1991 (see especially reasons, point 4), where the board stated "once the product itself is part of the state of the art and is not novel according to the criterion of novelty as set out in Article 54(1) EPC, the fact of defining this product by reference to a new process is irrelevant to the question of novelty".

It follows that "product-by-process" claims in general have to be interpreted in an absolute sense, i.e. independently of the process. Therefore, if the novelty of a "product-by-process" claim is at issue, novelty has to be examined and assessed independently of the potential novelty of the process.

For these reasons claim 19 lacks novelty under Art. 33(2) PCT; see D1a, examples 1-3 and D4 - D29.

2. Novelty can be acknowledged for claims 1 - 18 because in none of the available documents is mentioned the distinguishing feature hexahydrocarbyldisiloxane of formula (iii) in connection with the preparation of unsaturated carboxylate monomers of formula (I) or (II) according to claim 1.
3. The closest state of the art is considered to be disclosed in D3. This document referred to in the description at page 3 describes a method for reacting a compound of formula (III) with acetic anhydride or benzoic anhydride in the presence of zinc chloride.  
Claim 1 is distinguished therefrom by the following features: starting material (IV) or (V) in which R1 and R2 are H or alkyl rather than Ph.

The problem to be solved by the present invention may therefore be regarded as preparing compounds of formulas (I) or (II).

Working in analogy to D3 does not give the wanted products; see comparative experiments.

The method according to D2 employs the same starting materials as the invention but not the catalyst. D2 does not describe the preparation of the wanted products; see example 8. Hence, none of the docs D2 or D3 alone or in combination suggests the process according to claims 1-18.

4. If the applicants wish to incorporate the documents mentioned on page 2 the disclosure thereof should be included expressis verbis in the description under the



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conditions set out in the Guidelines C-II, 4.18 or the partial phrase "incorporated by reference" should be deleted.

5. Any incorporation of documents as mentioned on page 15, paragraph 5 will be considered as added matter. The paragraph should, therefore, be deleted.
6. The obscure statements in the description on page 15 paragraph 6 to page 16 last paragraph should be deleted in order to avoid unclarities about the scope of protection afforded by the claims.